**Project Title :** Platformer Minecraft

**Project Members :**

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**Project Description and main purpose**

Our goal in creating a Minecraft-style platformer game in Python is to learn how to use the Python programming language to create interactive games. We want to get acquainted with the basic principles of game development, learn how to create game objects and mechanisms, as well as create an exciting gameplay. We use Python in combination with the Pygame library to develop the game, which will allow us to easily manage graphics, animations and interactions within the game world. Also, this project is useful for the beginner game developers, to be familiar with how game development process is structured, and organized.

**Stages of Development of platformer Minecraft**

**1. Idea and Design**

At this stage, the general concept of the game is determined. We develop character designs, create the concept of levels, and define the main gameplay elements. The key emphasis is on making the Minecraft-style game recognizable, with unique features and visual style.

**2. Game Engine Development**

Using the Pygame library, the creation of basic game objects and mechanisms begins. We are creating a game window, adding basic elements such as the player character, levels and obstacles. At this point, the focus is on graphics, animation, and event handling.

To ensure that the game progress can be saved and loaded, we are implementing the pickle module. This mechanism allows us to serialize level data and save it to a file. This approach allows the game to save the player's progress between sessions and provides a convenient mechanism for making changes to levels and game objects in the future.

**3. Gameplay Development**

At this stage, we add gameplay, making the game interesting for the player. We implement character management, mechanics of overcoming obstacles, and also introduce elements like battles with opponents. We use the Pygame functionality to process input, react to events, and play sound effects.

**4. Revision and Testing**

This stage includes the refinement of the game based on feedback and testing to identify errors. We are implementing improvements in gameplay, graphics and animation. It is also important to thoroughly test the saving and loading of data using the pickle module to make sure that the mechanism for saving the game state is reliable.

**Contribution to the project**

We welcome your contributions to the development of the project!

If you find an error or encounter a problem, please contact us, we will definitely fix the error found or the proposed changes. Even small comments or descriptions can be very useful.

**Contact information and feedback form:**

We appreciate your opinion and are ready to listen to your comments, suggestions and questions. Here are some ways you can contact us:

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**Project status and future plans**

The project is currently under development. It is planned to add new levels, improve graphics, optimize code and much more. Stay tuned!